

**AMENDMENTS TO THE SPECIFICATION**

Please amend the Specification as follows, where current additions are noted with underlined text and current deletions are indicated by ~~strikethrough~~ text.

**I-Amendments to Paragraph 7**

“[0007] In some embodiments, the fullerene-based amino acids of the present invention comprise fullerene species that are endohedrally-doped with one or more dopant species. Such dopant species include, but are not limited to, radioactive species, non-radioactive species, ~~metals~~ metals, gases, spin 1/2 nuclei, and combinations thereof.”

**II-Amendments to Paragraph 24**

“[0024] FIG. 12 depicts the synthesis of fullerene peptide I (SEQ ID NO. 1) in accordance with an embodiment of the present invention....”

**III-Amendments to Paragraph 48**

“[0048] Approximately 50 mg N-Ac-Fullercine ~~Fullericine~~-OMe was added to a Schlenk flask equipped with a magnetic stir bar....”

**IV-Amendments to Line Immediately Above Paragraph 52**

“Synthesis of Fullerene Peptide I (Glu-Ile-Ala-Gln-Leu-Glu-BAA-Glu-Ser-Gln-Ala-Ile-Glu-NH<sub>2</sub>) (SEQ ID NO. 1)”

**V-Amendments to Paragraph 52**

“[0052] The coupling of the first 6 residues of fullerene peptide I (SEQ ID NO. 1) was carried out on an automated APEX 396 Multiple Peptide Synthesizer (Advanced ChemTech) under nitrogen flow. 430 mg (0.3 mM) rink resin was used as solid phase. Each coupling involved a 4-fold amino acid excess, and HBTU, N-hydroxybenzotriazole (HOBT) as activators and diisopropylethylamine (DIEA) as base in a 1:1:1:3 ratio. Fmoc deprotection was performed using 20% ~~per~~piperidine piperidine in DMF solution....”

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**VI-Amendments to Line Immediately Above Paragraph 53**

“Synthesis of Fullerene Peptide II (BAA-Glu-Glu-Glu-Glu-GlyGly-Ser-COOH) (SEQ ID NO. 2)”

**VII-Amendments to Paragraph 53**

“[0053] The couplings of first 7 residues after serine of fullerene peptide II (SEQ ID NO. 2) were carried out on an automated APEX 396 Multiple Peptide Synthesizer (Advanced ChemTech) under nitrogen flow. 430 mg (0.3 mM) Fmoc-serine-rink resin was used as solid phase. Each coupling uses 4-fold amino acid excess, and HBTU, HOBT as activators and DIEA as base in a 1:1:1:3 ratio. Fmoc deprotection ~~deprotection~~ was performed using 20% ~~per~~ piperidine piperidine in DMF solution.”

**VII-Amendments Immediately Below Paragraph 57**

**SEQUENCE LISTING**

<110> William Marsh Rice University

<120> Fullerene-Based Amino Acids

<130> 11321-P080WOUS

<140> US 10/585,277

<141> 2008-12-02

<150> PCT/US05/001187

<151> 2005-01-14

<150> US 60/536,544

<151> 2004-01-14

<160> 2

<170> PatentIn version 3.5

<210> 1

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